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Title: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR PARTICIPATION IN AUTOIMMUNE DISEASE

IN THE CLAIMS

- 1. (Cancelled)
- 2. (Original) An isolated immunoglobulin antibody that specifically binds to human glucose-6-phosphate isomerase.
- 3. (Currently Amended) An The immunopolypeptide of claim 2 comprising at least one CDR sequence selected from the group consisting of SEQ ID NO's: 15-56 or a significant homolog thereof.
- 4. (Original) An immunopolypeptide according to claim 3 having a triplet of CDR sequences.
- 5. (Original) An immunopolypeptide according to claim 4 wherein each CDR of the triplet is separated from other CDR's by a spacer amino acid sequence.
- 6. (Original) An immunopolypeptide according to claim 5 wherein the spacer amino acid sequence is a framework region sequence having an amino acid sequence selected from the group consisting of SEQ ID NO's:57-108 or a significant homolog thereof.
- 7. (Currently Amended) An immunopolypeptide according to claim [[6]] 5 wherein the CDR's of the triplet are selected from either a light chain group or a heavy chain group.
- 8. (Original) An immunopolypeptide according to claim 7 wherein the CDR's are matched according to their Fab source.

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- 9. (Original) An immunopolypeptide according to claim 8 wherein the framework region sequence is matched to the Fab source of the CDR triplet.
- 10. (Original) An immunopolypeptide according to claim 9 wherein the amino acid sequence is a V_L or V_H fragment of the Fab source of the matched CDR triplet and framework regions.
- 11. (Currently Amended) An immunopolypeptide having an amino acid sequence substantially homologous to a sequence selected from the group consisting of SEQ ID NO's: 1-[[14]] 108.
- 12-23. (Cancelled)
- 24. (Original) An antisense oligonucleotide that specifically hybridizes with a polynucleotide encoding anti-glucose-6-phosphate isomerase antibody or encoding glucose-6-phosphate isomerase.
- 25-27. (Cancelled)
- 28. (Original) A composition comprising immobilized human glucose-6-phosphate isomerase.
- 29. (Cancelled)
- 30. (Original) A nucleotide sequence having a sequence selected from the group consisting of SEQ ID NOs: 109-122.
- 31-32. (Cancelled)

PRELIMINARY AMENDMENT

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Title: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR PARTICIPATION IN AUTOIMMUNE DISEASE

33. (Currently Amended) A pharmaceutical composition comprising an immunopolypeptide of claim [[1]] 2 and a pharmaceutically acceptable carrier.

34-37. (Cancelled)

- 38. (Original) A method for diagnosis of autoimmune disease comprising determining the presence of an immune complex formed by combining the blood sera of a patient with human glucose-6-phosphate isomerase.
- 39. (Currently Amended) A method for treatment of a patient having autoimmune disease comprising administering to the patient an effective amount of an immunopolypeptide according to claim [[1]] 2.

40-43. (Cancelled)

- 44. (Original) A method for treatment of a patient having autoimmune disease comprising filtering the patient's blood extracorporeally through a filter system containing immobilized human glucose-6-phosphate isomerase.
- 45. (Original) A method for treatment of a patient having autoimmune disease comprising administering to the patient an effective desensitizing amount of human glucose-6-phosphate isomerase.
- 46. (Cancelled)